

DATE: June 10, 2019

AGENDA ITEM #2

TO: Environmental Commission

FROM: Callie Niday, Staff Liaison

SUBJECT: Environmental Commission Work Plan

RECOMMENDATION:

Review and take action, as appropriate, on the 2019/20 Environmental Commission Work Plan

BACKGROUND

The Environmental Commission met in a Joint Meeting with the City Council on May 7, 2019 to review the Commission's 2018/19 Accomplishments and Draft 2019/20 Target areas and discussed issues and projects for the upcoming year. Based on this discussion, the targets were finalized, and the 2019/20 Work Plan was developed. The Targets and Work Plan are intended to focus the Commission's agenda items and will serve as a roadmap for projects and actions, as appropriate, during the 2019/20 year.

DISCUSSION

Environmental Commission Targets and resulting Work Plan for 2019/20 are:

- 1. Climate Action Plan
- 2. Water Conservation and Stormwater Management
- 3. Solid Waste Diversion
- 4. Community Outreach and Education

The Commission will review the targets, projects, and status updates at each of its monthly meetings and act appropriately.

Attachments:

- A. 2019/20 Targets and Work Plan
- B. Memo to Environmental Commission from Single-Use Plastics Subcommittee
- C. Memo to Environmental Commission regarding Anti-Idling Education Plan

ENVIRONMENTAL COMMISSION

2019/20 Targets & Work Plan June 10, 2019

| Targets | Projects | Assignments | Target Date | City Priority related to | Status |
|---|---|--|--------------|--|--|
| ion Plan | Review and comment on Building and Electric Vehicle Reach Codes | Subcommittee -Don Weiden, Laura Teksler and Lei Yuan | January 2020 | CAP Goals | SVCE presentation of Reach Codes on 5/29/2019 |
| Climate Action Plan | Update of City's CAP | Subcommittee to work with staff and Subconsultant | Monthly | CAP Goals | • |
| ı & nent | Green Infrastructure Plan | Assist staff in development and review of Plan | June 2019 | Storm Water Regional Discharge Permit | Staff made a presentation of their final plan to the Environmental Commission on May 13, 2019 Staff to present to Council in June 2019 |
| Water Conservation & Stormwater Management | | • | | | |
| | | | | | • |

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| version | Provide review comments on Solid Waste Disposal Contract | Subcommittee Don Weiden, Laura Teksler and Chad Martin | January 2020 | Solid Waste Disposal | Subcommittee met with staff and City Consultant on March 20, 2019 for a study session City held a Community Meeting on May 15, 2019 |
|-----------------------------------|--|--|--------------|-------------------------------------|--|
| Solid Waste Diversion | Investigate initiatives on limiting single use plastics | Subcommittee to work with staff and Subconsultant | Monthly | Recycling | • Update on June 10, 2019 |
| | Develop program in collaboration with the Los Altos History Museum | Environmental Education Fund held by LACF David Klein | June 2019 | Public outreach and education | Coordination with History Museum Apricot Stem Fair |
| each | Update environmental measures on the City web site | Chad Martin | Ongoing | Public outreach and education | • |
| Community Outreach & Education | Continue gas-powered leaf blower ban outreach and education | Laura Teksler | Ongoing | Public outreach and education | |
| Com | Continue anti-idling outreach and education | Don Weiden | Ongoing | Public outreach and | June 10, 2019 Report on Los Altos HS Survey Results |
| | Continue to support SVCEA community outreach and education | | Ongoing | Public outreach and education | |
| | Assist staff with various outreach and education efforts | Climate Action Plan Water Conservation Storm Water Management Solid Waste Diversion Urban Forest / Trees Downtown Vision | | Public outreach and education | |

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June 10, 2019

To: Environmental Commission

From: Single Use Plastics Subcommittee

Halkola, Weiden, Yuan

Subject: Environmental Commission

2018/2019 Targets & Work Plan

Discussed the status of the Subcommittee investigation at the February 11, 2019 Environmental Commission Meeting. Committee agreed that the Subcommittee should continue investigating and reporting on ordinances and regulations under consideration. This is an update for the June 10, 2019 Environmental Commission Meeting

1. CA Assembly Bill No. 1884

a. Signed by the Governor and filed on September 20, 2018

b. Adds Chapter 5.2 to Part 3 of Division 30 of the Public Resources Code which prohibits a full-service restaurant from providing single-use plastic straws unless requested by the customer.

c. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180AB18

2. CA Senate Bill No. 1335

a. Signed by the Governor and filed on September 20, 2018

- b. Adds to Chapter 6 to Part 3 of Division 30 of the Public Resources Code which the setting and maintenance of standards for sustainable food service packaging at state facilities by 1/1/2021 (does not include straws, cup lids, plastic bags and utensils)
- c. http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB133
 5

3. City of Berkeley

- a. Has been working on a Single Use Disposable Foodware and Litter Reduction Ordinance for about a year.
- b. Unanimously passed second reading of ordinance on February 19, 2019, item 1. Will become law on March 21, 2019. Municipal Code Chapter 11.64 https://www.codepublishing.com/CA/Berkeley/
- c. Article in San Jose Mercury News Monday January 28, 2019 by Ali Tadayon.

4. City of Sunnyvale Sustainability Commission

- a. The Sunnyvale Sustainability Commission recommended a Single Use Plastics
 Strategy study and the City has included funding for the study in their draft 2019 –

 2020 budget.
- b. The City Council has scheduled a study session on the proposed budget in May and budget adoption in June.
- c. Description of proposed <u>Single Use Plastics study</u> is available at some interesting attachments
- d. Contacts include Kristel Wickham and Doug Kunz
- e. Mark Bowers <u>MBowers@sunnyvale.ca.gov</u> 408-730-7421
- 5. City of Cupertino Sustainability Commission

- a. May have interest in working with other cities in Santa Clara County
- b. Contact is Gary Latshaw
- c. https://www.cupertino.org/our-city/commissions/sustainability-commission
- 6. Town of Los Altos Hills Environmental Initiatives Committee
 - a. May have interest in working with others
 - b. Contacts include Pat Lang and Peter Evans
 - c. http://www.losaltoshills.ca.gov/159/Environmental-Initiatives
- 7. Town of Los Gatos and City of Saratoga do not have Environmental or Sustainability Commissions
- 8. City of Mountain View calls meetings of its Council's Environmental Subcommittee or appoints Advisory Bodies when needed (Environmental Sustainability Task Force 2 is an example)
 - a. Mountain View is actively working with the County of Santa Clara Recycling and Waste Reduction Commission. Lori Topley is their representative and chair of the Source Reduction and Recycling Subcommittee of the Technical Advisory Committee under the Commission. Anticipate that work will begin on a Single Use Plastic model ordinance in the Fall.
 - b. Zero Waste Plan Workshop March 4, 2019
 - c. Contact Lori.Topley@mountainview.gov
- 9. City of Palo Alto Department of Sustainability
 - a. https://www.cityofpaloalto.org/services/sustainability/default.asp
 - b. See Palo Alto's Zero Waste Plan dated August 2018 page 15 item 13, page 19 item 26
 - c. Working on a <u>Foodware Packaging Reduction Ordinance</u> with a Fall 2019 introduction schedule
- 10. City of Santa Clara
 - a. Preliminary contacts yielded referral to Public Works / garbage service
 - b. Mission Trails provides disposal services
- 11. Santa Clara County
 - a. County of Santa Clara Recycling and Waste Reduction Commission (Los Altos is a voting member of this Commission) www.reducewaste.org
 - b. The Commission is proposing funding in FY 2019-2020 for the development of a single use plastics model ordinance
- 12. State of California
 - a. A single use plastics bill is under consideration. SB 54 by Allen and Wiener
 - b. Current requirements include that manufacturers and retailers of single use plastic packaging or products in CA to reduce waste generation through combined source reduction and recycling by 20% on 1/1/2022, 40% on 1/1/2026 and 75% by 1/1/2030.
 - c. Information on the Bill is located at http://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB54

ATTACHMENT C

June 10, 2019

To: Environmental Commission

From: Don Weiden

Subject: Anti-Idling Education Plan Update

OBJECTIVE

Reduce contribution to greenhouse gasses and air pollutants generated by discretionary vehicle idling in selected areas of Los Altos through vehicle operator behavioral change.

TARGET AUDIENCES

Student Drop-Off and Pick-Up, Business Parking Lot, delivery truck and City Fleet vehicle operators.

STATUS

| Partners | Sub-Partner | Actions |
|---------------------------|---|---|
| City of Los Altos | Calandra Niday, Sarah Hendricks | Developed City Policy prohibiting unnecessary vehicle idling, Installed anti-idling signs in City Hall parking lot |
| Los Altos High School | Vice Principal, GreenTeam and GreenTown Los Altos | Installed anti-idling signs in Drop-Off / Pick-Up crescent 8/2018, anti-idling request in Drop-Off / Pick-Up procedure 8/2018, ran outreach campaign 3/2019, performed after campaign survey 5/2019 |
| Los Altos K-8 Schools | District Superintendent, School Principals, PTA | EC & GreenTown presented at Principal Leadership Meeting 11/2018, Trying to secure interest |
| Bullis Charter Schools | Michelle Sanfilippo - teacher | GreenTown outreach, Trying to secure interest |
| Pinewood Schools | Monica Ventrice - teacher | GreenTown in contact with student environmental advisor, |
| GreenTown Los Altos | Cheryl Weiden | Lead in contacting partners and sub partners. Assistance with publications, advertising stickers, campaigns and education. |
| Los Altos Businesses | LAVA, Rancho Center, Safeway, Dreygers, Chamber of Commerce, etc | Secure approvals with assistance from GreenTown Los Altos. Present education plan |

LOS ALTOS HIGH SCHOOL ACTIONS

A three day survey was performed on December 1, 4 and 5 2017. Anti-Idling signs were installed in the Pick-Up Drop-Off Crescent off Almond Avenue in August of 2018. An anti-idling request was included in the Pick-Up Drop-Off procedures to students in August of 2018. Los Altos High School GreenTeam performed an anti-idling campaign on March 4 thru 8, 2019. A three day survey was performed on May 13, 14 and 15, 2019. Survey data follows:

| LOS ALTOS HIGH | SURVEY | IDLING | OCCUPIED | VEHICLES | AVERAGE |
|---------------------------------------|--|----------|----------|----------|---------|
| SCHOOL (3 Day Survey) | TIME | MINUTES | VEHICLES | IDLING | IDLING |
| · · · · · · · · · · · · · · · · · · · | MINUTES | OBSERVED | WAITING | 1+ | MINUTES |
| | The second secon | | | MINUTES | PER DAY |
| December 2017 | 519 | 1080 | 431 | 141 | 360 |
| May 2019 | 547 | 224 | 441 | 62 | 75 |
| | | | | | |
| Front Pick-Up Drop-Off | 306 | 979 | 348 | 121 | 326 |
| Crescent December 2017 | | | | | |
| Front Pick-Up Drop-Off | 280 | 122 | 318 | 35 | 41 |
| Crescent May 2019 | | | | | |
| | | | | | |
| Back Jardin & Casita | 213 | 101 | 83 | 20 | 34 |
| December 2017 | | | | | |
| Back Jardin & Casita May | 267 | 102 | 123 | 27 | 34 |
| 2019 | | | | | |

A summary of data collected is attached to the end of this report

The data collected show

- The survey time and vehicle count for the December 2017 and May 2019 surveys were similar.
- Total idling observed was reduced by 79%
- Total idling observed in the Pick-Up Drop-Off Crescent was reduced by 88%
- Total idling observed at Jardin and Casita was generally unchanged

General conclusions

- The anti-idling signs and campaign were effective in significantly reducing discretionary idling in the Front Pick-Up Drop Off crescent.
- There was essentially no change in the idling at the Back Jardin and Casita Pick-up location. Note that in the Back Jardin and Casita Pick-Up area:
 - No anti-idling signs are posted
 - Anti-idling campaign activity was limited and difficult due to a high percentage of Spanish only speaking drivers
 - o The City streets made campaigning and monitoring difficult
- Campaign and education information should be in Spanish as well as English

| Date Day Time Time (d) | Idling Survey Results Revised 12/5/2017 | | | | | | N. S. M. | | | | | | | | |
|--|---|---------------|------------|----------------------|----------------|-----------|------------|-----------|-----------|----------------------|------------|-------------------------|--------------|--------------------------|--|
| Date Day Time H Cars # Cars A Min # Cars A M | מונים וכל ולים ביים | | | | | 7 | | | | | | | | | |
| os HS, Almond Av, Oropodif Cresent 12/1/2017 Friday 2:10 3:54 4 7 4 5 18 104 281 107 38 | ocation | Date | Dav | Survey Start Time | | | | # Cars 3 | | # Cars 5+ Min Idl | Survey | Idling Time Observed | | Total Vehicles Idling 1+ | Comments |
| os HS, Jardin & 12/1/2017 Friday 3:19 3:43 1 1 2 2 2 4 11 13 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | os Altos HS, Almond Av, ckup / Dropoff Cresent | 12/1/2017 | | 2:10 | 8:5 | 4 | | 4 | · S | 18 | | | | | Clear, Sunny, 63F, Note of the 18 cars observed idling 5+ min, 10 idled 10+ min, 5 idled 20+ min and 1 idled 30+ min, total 8 of 231 min of idling |
| os HS, Jardin & 12/1/2017 Friday 3:19 3:43 1 1 2 24 11 13 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | os Altos HS, Jardin Av asita to Panchita) | 12/1/2017 | | 2:15 | 2:5 | | 1 | | | - | | | | | 2 Clear, Sunny, 63F |
| os HS, Almond Av, / Dropoff Cresent 12/4/2017 Monday 2:10 3:42 8 3 3 3 3 3 19 92 281 103 36 os HS, Jardin & 12/4/2017 Monday 2:18 2:49 1 1 1 3 33 32 16 6 os HS, Jardin & 12/5/2017 Tuesday 2:15 2:51 2:51 17 19 16 15 74 519 1080 431 141 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3:53 3 3 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3:07 3:53 3 3 1 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 3 1 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 1 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 1 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 1 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 3 1 1 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 17 19 16 15 74 519 1080 431 141 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3:07 117 19 16 15 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 3 1 1 2 2 46 27 20 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 17 19 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 17 17 19 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 17 17 19 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 18 17 18 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 18 17 18 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 18 17 18 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 18 17 18 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 18 17 18 16 15 74 519 1080 6 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 18 17 18 16 15 74 50 5190 1080 90.78 10100 80 1000 1000 1000 1000 1000 100 | os Altos HS, Jardin & ssita | 12/1/2017 | | 3:19 | 3:4 | | | 1 | 2 | | 24 | | | | 3 Clear, Sunny, 63F |
| os HS, Jardin & 12/4/2017 Monday 2:18 2:49 1 1 1 31 20 8 2 2 os HS, Jardin & 12/4/2017 Monday 3:10 3:43 1 1 1 3 33 33 32 16 6 os HS, Jardin & 12/5/2017 Tuesday 2:10 4:00 4 5 6 2 30 110 417 138 47 os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3:53 3 1 2 46 27 20 6 lail dling times are greater than observed idling times because idling before start of observation and after completion of observation is not recorded. | is Altos HS, Almond Av, ckup / Dropoff Cresent | 12/4/2017 | Monday | | 3:4 | 80 | m | ĸ | m | 19 | | | | | Clear, Sunny, 63F, Note of the 19 cars observed idling 5+ min, 12 idled 10+ min, 5 5 idled 20+ min, total 246 min of idling |
| os HS, Jardin & 12/4/2017 Monday 3:10 3:43 1 1 1 3 33 32 16 6 6 6 6 7 10 417 138 47 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | s Altos HS, Jardin & sita | 12/4/2017 | Monday | | 2:4 | | | 7 | | 1 | | | | | Clear, Sunny, 63F, Note the one vehicle observed idling 5+ min actually idled for 2 17 min |
| os HS, Almond Av, Dropoff Cresent 12/5/2017 Tuesday 2:10 4:00 4 5 6 2 30 110 417 138 47 Os HS, Jardin & 12/5/2017 Tuesday 2:15 2:51 1 36 4 7 1 Os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 1 2 46 27 20 6 In all idling times are greater than observed idling times because idling before start of observation and after completion of observation is not recorded. | s Altos HS, Jardin & sita | 12/4/2017 | Monday | | 3:4 | 1 | | 1 | 1 | 8 | | | | | Clear, Sunny, 63F, Note of the 3 cars observed idling 5+ min, 1 idled 14 min, 5 total 24 min of idling |
| os HS, Jardin & 12/5/2017 Tuesday 2:15 2:51 1 36 4 7 1 1 1 1 | s Altos HS, Almond Av, ckup / Dropoff Cresent | 12/5/2017 | Tuesday | | | | S | 9 | 2 | 30 | | | | | |
| 12/5/2017 Tuesday 3:07 3:53 3 1 2 46 27 20 6 431 141 12/5/2017 Tuesday 3:07 3:53 3 1 1 2 46 27 20 6 431 141 13 16 15 74 519 1080 431 141 14 141 15 16 15 74 519 1080 6 431 141 16 17 19 16 15 74 519 1080 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 | s Altos HS, Jardin & sita | 12/5/2017 | Tuesday | | | | | | 1 | | 36 | | | | Clear, Sunny, 66F |
| otes Actual idling times are greater than observed idling times because idling before start of observation and after completion of observation is not recorded. An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 90.7 kilograms of CO2 emission (1.4 x 60 x 1080 = 90,720) | s Altos HS, Jardin & sita | 12/5/2017 | Tuesday | | 3:5 | | m | | - | 2 | | | | | Clear, Sunny, 66F, Note of the 2 cars observed idling 5+ min, 1 idled 7 min and 6 one idled 10 min, total 17 min of idling |
| Actual idling times are greater than observed idling times because idling before start of observation and after completion of observation is not recorded. An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 90.7 kilograms of CO2 emission (1.4 x 60 x 1080 = 90,720) | | | | | | 17 | 19 | 16 | 15 | 74 | | | | | |
| Actual idling times are greater than observed idling times because idling before start of observation and after completion of observation is not recorded. An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 90.7 kilograms of CO2 emission (1.4 x 60 x 1080 = 90,720) | otes | | | | | | | | | | | | | | |
| An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 90.7 kilograms of CO2 emission (1.4 x 60 x 1080 = 90,720) | Actual idling times are g | reater than o | bserved ic | lling times bec | ause idling be | efore sta | art of obs | ervation | and after | completic | on of obse | ervation is no | t recorded. | | |
| | An idling vehicle emits 1. | 4g of CO2 pe | r second, | Reference Var | nderbilt paper | Article | 4.1. The | refore, w | e observe | ed 90.7 kil | ograms of | CO2 emissic | in (1.4 x 60 | x 1080 = 90 | 2,720) |

| Idling Survey Results | | | | | | | 11 1 1 1 | | | | | | | |
|--|-------------------|------------|---------------------------------|--------------------|-----------------|-----------------|-------------------------------|------------------------|----------------------|------------|--|------------------------------|---------------------------------------|--|
| Completed 05/15/2019 | | | | | | | | | | | | | | |
| Location | Date | Dav | Survey Start Survey End Time | Survey End Time | # Cars 1 Min | # Cars 2 Min | # Cars 3 4 Min Min Idl Idl | # Cars 4 Min Idl | # Cars 5+ Min Idl | Survey | Total Idling Time Vehicles Observed Waiting | Total Vehicles Waiting | Total Vehicles Idling 1+ min | Comments |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 5/13/2019 Monday | Monday | | 15:55 | | | - | e e | | 100 | 72 | | | Clear, Sunny, 68F, Note of the 4 cars observed idling 5+ min, 1 idled 6+ min, 1 idled 7+ min and 1 idled 22+ min, total of 19 40 min of idling |
| Los Altos HS, Jardin & Casita | 5/13/2019 Monday | Monday | 14:15 | 15:55 | 4 | 9 | 1 | | 9 | 100 | 99 | 53 | | Clear, Sunny, 63F, Note of the 6 cars observed idling 5+ min, 1 idled 7+ min, 1 idled 8+ min and 2 idled 11+ min, total of 17 40 min of idling |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 5/14/2019 Tuesday | Tuesday | 14:15 | 15:55 | 2 | 1 | | S | | 100 | 24 | 92 | | 8 Cloudy, 63F |
| Los Altos HS, Jardin & Casita | 5/14/2019 Tuesday | Tuesday | 14:15 | 15:55 | 7 | 2 | 1 | | Я | 100 | 33 | 36 | | Cloudy, 66F, Note of the three vehicles observed idling 5+ min, 1 idled for 9+ min and 1 idled for 10+ min, total of 24 min of 8 idling |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 5/15/2019 | Wednesd | 13:55 | 15:15 | 2 | 2 | | Э | 1 | 80 | 26 | 102 | | Cloudy, 63F, Note of the one vehicle 8 observed idling 5+ min, it idled for 8+ min |
| Los Altos HS, Jardin & Casita | 5/15/2019 | Wednesd | 14:05 | 15:12 | 1 | 1 | | | | 67 | en en | 34 | | 2 Cloudy, 63F |
| | | | | | 16 | 18 | 3 | 11 | 14 | 547 | 224 | 441 | . 62 | |
| Notes | | | | | | | | | | | | | | |
| 1. Actual idling times are greater than observed idling times because idling | reater than o | bserved ic | dling times bec | ause idling b | before st | art of ob | servation | and afte | er completic | on of obse | before start of observation and after completion of observation is not recorded. | t recorded. | | |
| 2. An idling vehicle emits 1.4g of CO2 per second, Reference Vanderbilt paper Article 4.1. Therefore, we observed 90.7 kilograms of CO2 emission (1.4 x 60 x 224 = 18,816) | .4g of CO2 pe | er second, | Reference Van | derbilt pape | er Article | 4.1. The | erefore, w | ve observ | ved 90.7 kilo | ograms of | CO2 emissic | (1.4 x 60) | x 224 = 18,8 | 16) |
| 3. Survey did not include the following additional pickup areas at LAHS: main parking lot, Almond Ave, Jardin & Los Ninos | ne following a | dditional | pickup areas a | t LAHS: main | n parking | lot, Alm | ond Ave, | Jardin & | Los Ninos | | | | | |

| Idling Survey Results | | | | | | | | | | | | | | |
|---|-------------------|------------|----------------------|-------------------------|-----------|------------------------|-------------|------------------------|----------------------|------------|---|--|---------------------------------------|---|
| Pickup / Dropoff Cresent - Before and After Comparison | Before and A | fter Comp | arison | | | | | | | | | | | |
| Revised 12/5/2017 | | | | | | | | | | | | | | |
| Location | Date | Day | Survey Start Time | Survey Start Survey End | # Cars | # Cars 2 Min Idl | # Cars 3 | # Cars 4 Min Idl | # Cars 5+ Min Idl | Survey | Total Idling Time Vehicles Observed Waiting | Total Vehicles Waiting | Total Vehicles Idling 1+ min | Comments |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 12/1/2017 | Friday | 2:10 | 0 3:54 | 4 | 7 | 4 | S | 18 | | 281 | | | Clear, Sunny, 63F, Note of the 18 cars observed idling 5+ min, 10 idled 10+ min, 5 idled 20+ min and 1 idled 30+ min, total of 231 min of idling |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 12/4/2017 Monday | Monday | 2:10 | 0 3:42 | 8 | 8 | 8 | 8 | 19 | 92 | 281 | 103 | | Clear, Sunny, 63F, Note of the 19 cars observed idling 5+ min, 12 idled 10+ min, 36 5 idled 20+ min, total 246 min of idling |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 12/5/2017 Tuesday | Tuesday | 2:10 | 0 4:00 | 4 | S | 9 | 2 | 30 | 110 | 417 | 138 | 47 | Clear, Sunny, 66F, Note of the 30 cars observed idling 5+ min, 17 idled 10+ min, 9 idled 15+ min, 4 idled 20+ min, 1 idled 30+ min, total 377 min of idling |
| | | | | | 16 | 1 | 13 | 10 | 29 | 306 | 979 | 348 | 121 | |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 5/13/2019 Monday | Monday | 14:15 | 5 15:55 | 2 | 9 | 1 | e e | 4 | 100 | 72 | 124 | | Clear, Sunny, 68F, Note of the 4 cars observed idling 5+ min, 1 idled 6+ min, 1 idled 7+ min and 1 idled 22+ min, total of 40 min of idling |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 5/14/2019 Tuesday | Tuesday | 14:15 | 5 15:55 | 2 | 1 | | S | | 100 | 24 | 92 | 8 | Cloudy, 63F |
| Los Altos HS, Almond Av, Pickup / Dropoff Cresent | 5/15/2019 | Wednesd | d 13:55 | 5 15:15 | 2 | 2 | | m | 1 | 80 | 26 | 102 | | Cloudy, 63F, Note of the one vehicle 8 observed idling 5+ min, it idled for 8+ min |
| | | | | | 6 | 6 | 1 | 11 | 2 | 280 | 122 | 318 | 35 | |
| Notes | | | | | | | | | | | | | | |
| 1 Actual idling times are greater than observed idling times because idling | reater than o | bserved in | dling times be | cause idling t | before st | art of obs | servation a | and after | completic | on of obse | rvation is no | before start of observation and after completion of observation is not recorded. | | |

| Friday Survey Start Survey End 1 Min 2 Min # Cars # Ca | Idling Survey Results Rear HS - Before and After Comparison | Comparison | | | | | | | | | | | |
|--|---|------------|---------|----------------------|---|---|---|------------------------|----------------------|--------|-------------------------|---------------------------------------|---|
| os HS, Jardin & Survey Start Survey Flat (2 are) os HS, Jardin & Survey Start Survey Flat (2 are) os HS, Jardin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Stratin & Survey Start Survey Flat (3 are) os HS, Jardin & Stratin & Stratin & Stratin & Survey Start Survey St | Revised 12/5/2017 | | | | | | | | | | | | |
| os HS, Jardin & 12/1/2017 Friday 3:19 3:43 1 1 2 2 24 11 13 3 3 3 2 | ocation | Date | Day | Survey Start Time | | | | # Cars 4 Min Idl | # Cars 5+ Min Idl | Survey | Idling Time Observed | Total Vehicles Idling 1+ min | Comments |
| os HS, Jardin & 12/1/2017 Friday 3:19 3:43 1 1 2 24 24 11 13 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 | os Altos HS, Jardin Av Casita to Panchita) | 12/1/2017 | | 2:15 | | 1 | | | 1 | | | | Clear, Sunny, 63F |
| os HS, Jardin & 12/4/2017 Monday 2:18 2:49 1 1 1 31 20 8 2 2 | os Altos HS, Jardin & asita | 12/1/2017 | | 3:19 | | | 1 | 2 | | 24 | 11 | | Clear, Sunny, 63F |
| os HS, Jardin & 12/4/2017 Monday 3:10 3:43 1 1 1 3 33 32 16 6 6 6 8 | os Altos HS, Jardin & asita | 12/4/2017 | Monday | | | | 1 | | 1 | | 20 | | Clear, Sunny, 63F, Note the one vehicle observed idling 5+ min actually idled for 17 min |
| os HS, Jardin & 12/5/2017 Tuesday 2:15 2:51 3 3 1 2 46 27 20 6 6 10 0 12/5/2017 Tuesday 3:07 3:53 3 3 1 2 46 27 213 101 83 20 10 10 10 10 10 10 10 10 10 10 10 10 10 | os Altos HS, Jardin & asita | 12/4/2017 | Monday | | 1 | | 1 | 1 | e e | | | | Clear, Sunny, 63F, Note of the 3 cars observed idling 5+ min, 1 idled 14 min, total 24 min of idling |
| os HS, Jardin & 12/5/2017 Tuesday 3:07 3:53 3 3 1 2 46 27 20 6 St. Jardin & 5/13/2019 Tuesday 14:15 15:55 2 2 1 3 100 33 34 22 St. Jardin & 5/14/2019 Tuesday 14:15 15:12 1 1 1 6 0 9 267 102 123 27 St. Jardin & 5/15/2019 Wednesd 14:05 15:12 1 1 1 2 6 100 65 33 34 22 St. Jardin & 5/15/2019 Tuesday 14:05 15:12 1 1 1 2 6 100 67 33 34 22 | os Altos HS, Jardin & asita | 12/5/2017 | Tuesday | | | | | 1 | | 36 | 4 | | Clear, Sunny, 66F |
| os HS, Jardin & S/13/2019 Monday 14:15 15:55 4 6 1 6 10 66 53 17 os HS, Jardin & S/14/2019 Tuesday 14:15 15:55 2 2 1 3 100 33 36 88 os HS, Jardin & Wednesd S/15/2019 ay 14:05 15:12 1 1 1 6 0 0 9 267 102 123 27 | os Altos HS, Jardin & asita | 12/5/2017 | Tuesday | | | m | | 1 | 2 | | | | Clear, Sunny, 66F, Note of the 2 cars observed idling 5+ min, 1 idled 7 min and 6 one idled 10 min, total 17 min of idling |
| os HS, Jardin & 5/13/2019 Monday 14:15 15:55 4 6 1 1 6 100 66 53 17 os HS, Jardin & 5/14/2019 Tuesday 14:15 15:55 2 2 1 3 100 33 36 8 os HS, Jardin & 5/14/2019 ay 14:05 15:12 1 1 6 2 0 9 267 102 123 27 | | | | | 1 | 4 | 3 | 2 | 7 | | 101 | | |
| os HS, Jardin & S/14/2019 Tuesday 14:15 15:55 2 2 1 3 100 33 36 8 8 | os Altos HS, Jardin & asita | 5/13/2019 | Monday | | 4 | 9 | 1 | | 9 | | 99 | | Clear, Sunny, 63F, Note of the 6 cars observed idling 5+ min, 1 idled 7+ min, 1 idled 8+ min and 2 idled 11+ min, total of 40 min of idling |
| os HS, Jardin & Wednesd S/15/2019 ay 14:05 15:12 1 1 67 3 34 34 50 15:12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | os Altos HS, Jardin & asita | 5/14/2019 | Tuesday | | 7 | 2 | 1 | | e e | | | | Cloudy, 66F, Note of the three vehicles observed idling 5+ min, 1 idled for 9+ min and 1 idled for 10+ min, total of 24 min of idling |
| 7 9 2 0 9 267 102 123 | os Altos HS, Jardin & asita | 5/15/2019 | - | | 1 | 1 | | | | 29 | | | Cloudy, 63F |
| otes | | | | | 7 | 6 | 2 | 0 | 6 | | 102 | | |
| offes | | | | | | | | | | | | | |
| | otes | | | | | | | | | | | | |